ward growth of the spike terminated, it having reached exactly 24 feet. Some time before this, the scape began to throw out its lateral branches; these extend 6 inches to 2 feet from the main stem, to the number of forty-six, and branch out from all sides in graceful curves in the form of a candelabrum, which, indeed, the whole plant much resembles; at the extremities of these laterals are seated three to seven bunches of from twelve to fifty flowers, the total number of flowers being about 3500. The first bud expanded on the 8th of September, since which a great number have rapidly opened. It is scarcely correct to make use of the term opened; for the corolla does not expand. The stamens and style being protruded from among the upper points of the petals, and having a bright yellow colour, give a somewhat gay and light appearance to the plant, the petals themselves being of a yellowish-green hue. Some few months before the scape made its appearance, the leaves began to wither; and as the flower-spike rapidly increased, in the same ratio the leaves decayed and shrivelled, the juices they contained having evidently been stored up for the express purpose of supplying the nourishment required by the flower; and only by this means could the large amount of vegetable matter contained in the flower-scape have been collected in so short a time, as the roots of the plant are very inconsiderable. The whole plant dies immediately it has perfected its flowers, so that it can only flower "once" in its lifetime, be this ten or a hundred years.

Believe me, Gentlemen,
Yours sincerely,
W. Sowerby.

*On a variety of* Chorda filum. By Dr. J. E. Gray, F.R.S. &c.

The base and apex of *Chorda filum* (Sea-traces) are usually attenuated and acute. Mrs. Gray observed, in the specimens growing in Swanage Bay, that some individual fronds of a group from the same root had the apex largely dilated into a broad, ovate, hollow club, with a few minute, compressed, transparent spines near the more or less blunt top of the club. This club, which is often 4 or 5 inches long and an inch in diameter, is formed by a dilatation of the frond; and, like the usual state of the frond, it easily divides across and separates into a spiral band, as the common form of the frond is represented as becoming unrolled in fig. 3 of pl. 107 of Dr. Harvey's 'Phycologia Britannica,' and as described and figured by Dr. Greville, 'Algæ Britannicæ,' p. 48. t. 7. f. 2.

I do not recollect having observed this variety noticed in any work on British Algæ, which is the more remarkable, as the club, bobbing up and down on the surface of the sea like an angler's float, makes a very conspicuous object in the smooth water of that beautiful bay. I find it is noticed in Lyngbye's work on the Algæ of Denmark as "*Chorda filum β. inflata fronde simplicissima majori apice inflata*," p. 73 (1810), found in the "Sinu Otheniensi;" and he states that it is also described as a *Ceramium* by Roth, 1797; see Cat. Bot. i. 174.

This variety is not noticed by Agardh in his 'Synopsis Algarum Scandinaviæ,' p. 13, where he describes the frond as "e fibris spiraliter tortis constructæ," nor in his 'Species Algarum,' p. 161, nor in any other work I have at hand.

Swanage, Sept. 1858.

### *On the Influence of the Moon's Light upon Plants.*
By Prof. Zantedeschi.

The Abbé Tessier having made a great number of experiments upon etiolated plants, which had become white or yellow from being kept in the dark, observed that those exposed to the light of the moon, and kept in the dark during the day, were evidently less yellow or white than those kept in the dark day and night. (Acad. des Sc. de Paris, 1781; Bertholin, 1783; Giuseppe Toaldo, Vincento Padova, 1797.)

The Abbé Antonio-Maria Vassalli, Professor of Physics at Turin, relates that the Sensitive-plant is susceptible of the influence of moonlight. "Having," he says, "procured some sprouted seeds of the Sensitive-plant, twelve days after their germination I transplanted them into earth contained in glass bottles, and into other vessels filled with earth.

"I observed that their sleep had a regular periodicity. Exposed to the east two hours before sunrise, their leaves, which were perfectly closed at 1 A.M., began to open at dawn, and unfolded completely some little time after sunrise, more or less quickly according to the state of the air. If they are carried during the day into a dark place, or covered with an opake vessel, the leaves close, but not so exactly as during the night. Exposed afresh to the light, they open again slowly. In making these observations I was careful to shake all the pots equally, without covering them, in carrying them, in order that the variations might not be attributed to these shocks. After repeating the various observations, for greater certainty, I exposed the pots to the light of the moon.

"I did not remark any variation in the leaves when the exposure, commencing at 1 A.M., had lasted one hour; but after three hours the leaves were less closed, though still not open.

"Having one evening exposed the pots to the rays of the moon until midnight, when the leaves were not completely closed, I found them very well opened about 1 A.M.

"I attempted to arrange a lens so that its focus should fall on a closed leaf; but I could not detect any variation in the short space of time during which the light of the moon was condensed." (Opuscoli scelti di Milano, 1794.)

These observations have been renewed in our own time on vetches, by Prof. G. Giulj: he caused vetches to germinate and spring up in a cellar entirely shut up from the light both of the sun and moon; and the little plants were very white. Some of them were exposed for several nights to the action of the moon's rays, while others, also in full growth, were kept in complete darkness: the former acquired a